

TEN YEARS OF SCIENTIFIC AIRPLANE ASCENTS IN HOLLAND

By Dr. H. G. CANNEGIETER

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Ten years of upper-air observations by airplanes were completed at Soesterberg, Holland, in 1929, and eight years of similar observations at De Kooij, Holland. A

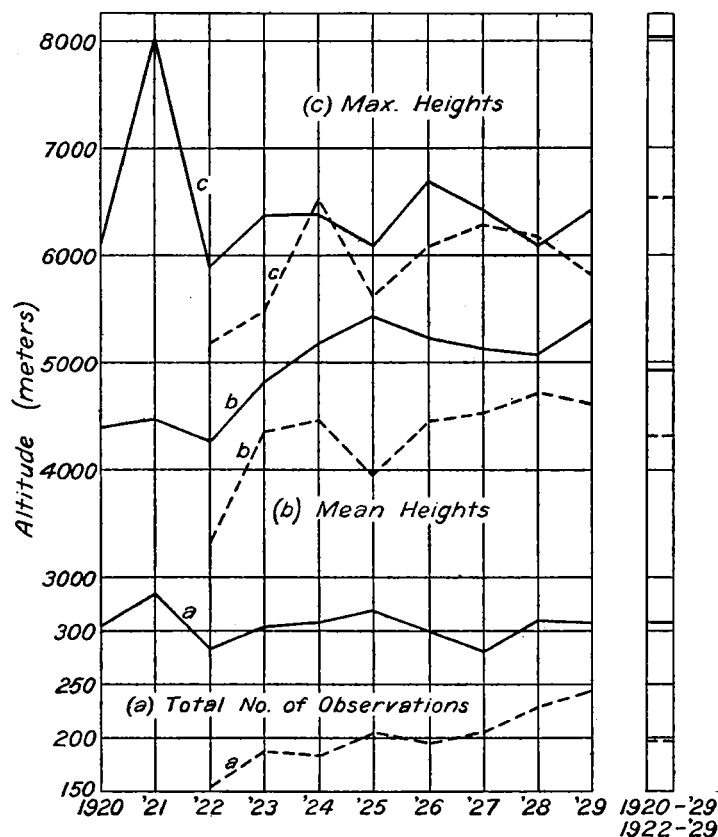


FIGURE 1.—Graph showing the total number of observations per year at Soesterberg, and the mean altitude attained

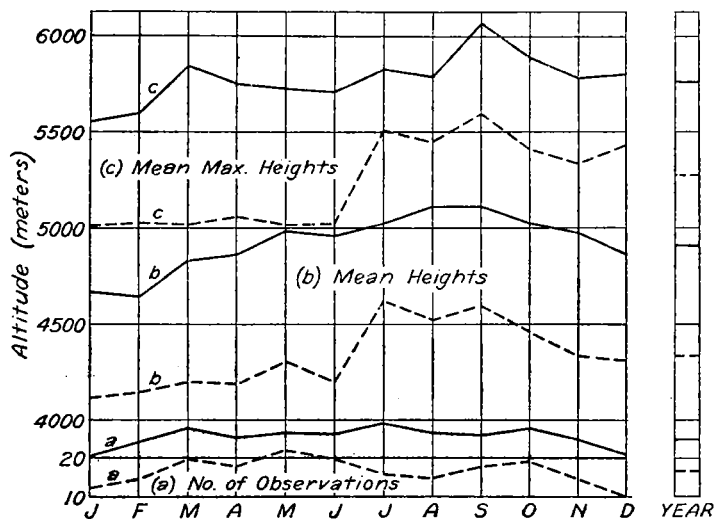


FIGURE 2.—Meteorological airplane observations in Holland: Solid line, Soesterberg, 1920-1929; dashed line, De Kooij, 1922-1929

good summary of the regularity of this service is shown by the accompanying charts.

It will be noted (fig. 1) that at Soesterberg the total number of observations per year averaged over 300 for the

10-year period and the mean altitude attained was nearly 5 km.

Figure 2 shows the monthly distribution. The least number of observations per month occurred in December and January, but at Soesterberg the average number of observations during these months did not fall below 20.

From 75 to 80 per cent of the observations were made before 10 a. m. and the remainder at later times during the day.

Note by abstractor.—It is interesting to compare these results with those obtained by kites and captive balloons in the United States. The average number of days per year (294) of kite and captive balloon observations at the five aerological stations of the Weather Bureau compares very favorably with these results. However, the mean altitude attained at these stations over the 9 year period 1922-1930, inclusive, is less than 2,700 meters above sea level.

S. HANZLIK ON ATMOSPHERIC PRESSURE EFFECT OF THE SUN-SPOT PERIOD

[Reprinted from Science Abstracts No. 754]

Part I. Yearly Means. S. Hanzlik. Gerlands Beitr. z. Geophys. 28. 1-3. pp. 114-125, 1930.—The difference of mean air pressure for the three years of sun-spot minimum and the succeeding three years of sun-spot maximum for stations over the whole globe is set out in a chart for each of the last five sun-spot periods, 1866-1919. Four different areas are indicated according to the sign of the effect. Areas of positive effect lie in the Indian monsoon region, pressure decreasing with increase of sun spots and vice versa. The fluctuations of this positive effect show a long period and a shorter one equal to two sun-spot periods (Hale's period). Over belts in middle latitudes and the Arctic regions Hale's period is shown but it is positive in middle latitudes when negative in the Arctic and vice versa. In South America there is a longer period but in a sense opposite to that in the Indian monsoon region. R. S. R.

SWEDISH-NORWEGIAN NORTHEASTLAND EXPEDITION

By LEONARD R. SCHNEIDER

During the summer of 1931, Hans W:son Ahlmann, professor of geography at the University of Stockholm, will lead a party of scientists to the little known region on and about Northeastland. Professor Ahlmann's party will board the *Quest* on or about June 15 at Narvik, Norway, and after a call at Spitzbergen to take on board supplies and a dog team, a stop will be made in Hinlopen Strait where, on Northeastland, supplies will be unloaded and a base camp constructed. Immediately upon the establishment of the base camp the members of the expedition will begin a summer of intensive study.

Two groups, one to study on the land, and one to carry on investigations in the nearby seas will conduct the major activities. Briefly, the land party will have as its work the following: (1) Meteorologists at the base camp will report their observations by radio to the *Quest* and to Sweden and Norway, (2) Professor Ahlmann and two assistants will go onto the inland ice for a month's study, and (3) geologists under O. Kulling and L. Rosenbaum, a topographer, will concentrate their efforts along Hinlopen Strait.

The investigations on board the *Quest* will be limited to the waters in the vicinity of Spitzbergen. The work of gathering sea-water temperatures, sea-water samples and of measuring depths, will be directed by H. Mosby of the Geofysical Institut, Bergen.